REFERENCE: 10140 EFFECTIVE: 09/15/12 REVIEW: 09/15/14

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# **INTRAOSSEOUS INFUSION (IO)**

# FIELD ASSESSMENT/TREATMENT INDICATORS

- 1. Primary vascular access in cardiac arrest patients eight (8) years of age and younger.
- 2. Any patient where venous access is unavailable by any other means.

# **CONTRAINDICATIONS**

- 1. Fracture of target bone.
- 2. Previous IO attempt and marrow entry at target site.

#### **PROCEDURE**

- 1. Select and prep the following preferred sites for appropriate patient age.
  - a. Eight (8) years of age and younger Anterior medial surface of tibia, 2cm below tibial tuberosity.
  - b. Nine (9) years of age and older
    - i. Lower end of tibia, 2cm above the medial malleous
    - ii. Proximal humerus.
  - c. Base Station contact Anterior distal femur, 2cm above the patella.
- 2. Confirmation of placement is verified by the following:
  - a. Needle stands upright without support.
  - b. Aspiration of blood/marrow.
  - c. Ability to infuse IV solution without s/s of extravasation.
  - d. Leave site visible.

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3. To control infusion pain on a conscious patient, use 2% Lidocaine.

- Prime the extension tubing with 0.5mg/kg of 2% Lidocaine and infuse *slowly* (over 30 to 60 seconds), not to exceed 50mg total. Allow one (1) minute for anesthetic effect before infusing fluids.
- 4. Infusion may need to be pressurized using syringe or pressure bag device.
- 5. Monitor site closely when administering dopamine for signs of extravasation

# **DOCUMENTATION**

In the event the receiving physician discovers the device is improperly placed, an Incident Report must be completed by the receiving hospital and forwarded to ICEMA within twenty-four (24) hours of the incident. Forms are available as part of the protocol manual and on the ICEMA website.